

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Media Bureau Seeks Comment on)	MB Docket No. 15-64
DSTAC Report)	

COMMENTS OF TIVO INC.

TiVo Inc. (“TiVo”) hereby responds to the request for comment on the report of the Downloadable Security Technical Advisory Committee (“DSTAC”).¹ TiVo has been a longtime advocate for a replacement of the CableCARD standard with solutions that better reflect today’s marketplace and technology, and urges the Commission to build on the work of the DSTAC by initiating a rulemaking to establish such solutions.

I. TIVO’S INNOVATIVE PRODUCTS ILLUSTRATE THE CONSUMER BENEFITS THAT WOULD RESULT FROM A COMPETITIVE RETAIL NAVIGATION DEVICES MARKET

TiVo generally agrees with the arguments made by the Consumer Video Choice Coalition regarding the state of competition in the market for retail navigation devices and the advantages that would flow to consumers from a truly competitive navigation devices market as envisioned by Section 629.² TiVo has been a consistent advocate for a competitive retail market for navigation devices, and has on numerous occasions

¹ *Media Bureau Seeks Comment on DSTAC Report*, MB Docket No. 15-64, Public Notice, DA 15-982 (rel. Aug. 31, 2015).

² Comments of The Consumer Video Choice Coalition, MB Docket No. 15-64 (filed Oct. 8, 2015); Comments of The Consumer Video Choice Coalition, MB Docket No. 15-158, at 2-8 (filed Aug. 21, 2015).

discussed the consumer benefits of Congress's goal of ensuring the competitive availability of set-top boxes and other devices used to access multichannel video programming.³ A competitive retail market ensures that consumers benefit from the full range of innovation and choice in how they access and view the programming they have paid for. TiVo's experience as a retail navigation devices provider underscores these benefits, as it has for over a decade been an industry leader in retail device design and functionality. TiVo introduced many popular features that were later adopted by some MVPDs for the boxes and user interfaces they supply — features ranging from basic DVR functionality, which is ubiquitous today, to the ability to stream and side-load linear video programming to consumer electronics devices such as tablets and smartphones.

Indeed, TiVo's newest product, the TiVo Bolt, provides a clear example of the innovation that can occur in a competitive retail market. In barely a week since its release, the TiVo Bolt has garnered almost 300 press articles, with over 100 unique stories and about 20 technical reviews. The response has been overwhelmingly positive. Renowned tech product commentator Walt Mossberg writes: "Not only does the new Bolt call itself the only TV box you'll need, it actually has new features to make that claim stronger."⁴ As Mossberg notes:

³ See, e.g., Comments of TiVo Inc., MB Docket No. 14-261, at 2-5 (filed Mar. 3, 2015); Comments of TiVo Inc., MB Docket No. 14-16, at 8-14 (filed Mar. 21, 2014); Petition for Rulemaking, CS Docket No. 97-80, PP Docket No. 00-67, at 21-23 (filed July 16, 2013); Reply Comments of TiVo Inc., CS Docket No. 97-80, PP Docket No. 00-67, at 5-14 (Oct. 25, 2013).

⁴ Walt Mossberg, *TiVo Bolt Review: Watching TV Faster*, Sep. 29, 2015, at <http://www.theverge.com/2015/9/29/9419725/tivo-bolt-review-walt-mossberg> (Mossberg, *TiVo Bolt Review*).

One of the most important features of the Bolt isn't new, but it's improved: it combines old-fashioned cable TV with popular online streaming services in one box. That means you can go from cable to Netflix without the common hassle of changing your TV's input to switch from your cable box to, say, your Apple TV or Roku.⁵

Writing for Forbes, Anthony Karcz describes TiVo Bolt's 4K streaming, and then notes that the Bolt's improved OneSearch feature "gives you searches of the aforementioned 4K streaming (available on Netflix and YouTube), OTA broadcasts and participating provider's VOD programs . . . all with one click."⁶ Karcz concludes by noting that "[i]n a media market where streaming boxes are gaining ground, yet everyone has a DVR from their cable provider, TiVo does a phenomenal job of bridging the gap. It proves that both business models can exist simultaneously, as long as you're willing to think outside the little black box."⁷

The reviews of TiVo Bolt demonstrate the innovation that occurs in the retail device market using CableCARD despite the often cumbersome CableCARD installation process and problems with MVPD support for CableCARD. Updated solutions would result in new products and innovations, similar to the innovation seen in the products used today for viewing streaming video from Apple, Google, Amazon,

⁵ *Id.*

⁶ Anthony Karcz, *TiVo's 4K Streaming Bolt Gives Roamio Users Compelling Reasons to Upgrade*, Sep. 30, 2015, at <http://www.forbes.com/sites/anthonykarcz/2015/09/30/time-to-upgrade-with-tivo-bolt/>. See also Geoffrey A. Fowler, *TiVo Bolt First Look: New DVR Superpowers Give New Reason Not to Cut Cable*, Wall St. J. Online, Sep. 29, 2015, at <http://www.wsj.com/articles/tivo-bolt-first-look-new-dvr-superpowers-give-new-reason-not-to-cut-cable-1443585301> ("This is a powerful feature: TiVo does the work for us of finding a show wherever it can, be it a live recording, cable provider video-on-demand, paid download or online streaming service like Netflix.").

⁷ Karcz, *TiVo's 4K Streaming Bolt Gives Roamio Users Compelling Reasons to Upgrade*, *supra* note 6.

Roku, and others.

The positive reviews of TiVo Bolt also demonstrate that there is a demand for a single box that integrates MVPD and OTT content. As commentator Walt Mossberg noted, describing the advantages of the TiVo Bolt:

[T]he fusion of linear cable and streaming internet video in one box is a big deal, even if it's been around — quietly — for a while. TiVo has finally got this right. . . . [U]nless you've cut the cord, you're going to want some mix of cable and streaming services. And this product pulls that off, while making old-fashioned TV much better⁸

TiVo's retail products were the first to give consumers the ability to view both MVPD-provided and online video distributor ("OVD") content and to search for content across both MVPD and OVD sources. And because TiVo is a manufacturer of retail devices not affiliated with any MVPD or producer of program content, it does not — and has no incentive to — favor content from one source over another.

Unfortunately, the market today is one in which almost 99 percent of MVPD subscribers lease set-top boxes from operators who have an economic incentive to favor their own content. Few if any operator-supplied set-top boxes (other than those using TiVo software) allow users to view OVD or other unaffiliated OTT content. These concerns are heightened in an era of increased industry consolidation and efforts to control the available user interface and user experience.⁹

⁸ Mossberg, *TiVo Bolt Review*, *supra* note 4.

⁹ See Susan Crawford, *The Big Lock-In*, Feb. 16, 2015, at <https://medium.com/backchannel/the-clock-is-ticking-on-comcasts-plan-to-take-over-internet-tv-460295f8d33a>; Petition to Deny of Netflix, Inc., MB Docket No. 14-57, at 73-75, 88-89 (Aug. 27, 2014) (discussing Comcast's ability and incentive to discriminate against OVDs based on its control of consumer set-top boxes and the worsening of this harm that will result from the proposed Comcast-Time Warner Cable merger); Petition to Deny of COMPTel, MB Docket No. 14-57, at 22-27 (Aug. 25, 2014) (same);

II. A COMPETITIVE NAVIGATION DEVICE MARKET BENEFITS SMALL AND MID-SIZED CABLE OPERATORS

Solutions that open set-top boxes to competition not only benefit retail device manufacturers, but also benefit small and mid-sized cable operators. Only the largest cable operators find it cost-effective to use unique or proprietary conditional access systems. The availability of non-proprietary nationwide security solutions free cable operators to purchase set-top boxes from a variety of suppliers, rather than being locked in to purchasing set-top boxes from a single conditional access vendor. The CableCARD standard has enabled a variety of set-top box manufacturers – including Samsung, Pace, TiVo, and Arris (prior to acquiring Motorola) – to supply low-cost boxes to small and mid-sized cable operators thanks to the economies of scale that a nationwide standard allow. Without CableCARD successor solutions, smaller operators will again be locked into a single supplier of conditional access solutions on a system-by-system basis as they were prior to CableCARD.¹⁰

III. THE “APP”-APPROACH WOULD ONLY ENTRENCH MVPD CONTROL AND WOULD NOT RESULT IN THE TYPE OF COMPETITION AND CONSUMER CHOICE ENVISIONED BY SECTION 629

The “Application-based Service with Operator-Provided User Interface” proposal¹¹ put forward by MVPDs and their vendors would not result in the type of

Petition to Deny of Public Knowledge and Open Technology Institute, MB Docket No. 14-57, at 36-40 (Aug. 25, 2014) (same).

¹⁰ The national CableCARD standard has allowed small and medium size cable operators such as Mediacom, RCN, Suddenlink, GCI, Midcontinent, Atlantic Broadband, Grande, and Armstrong to offer the TiVo box to their subscribers as the cable-provided set-top box, thereby providing their customers with higher quality service and greater functionality than they would have had with a typical cable set-top box.

¹¹ Report of Working Group 4 to DSTAC, August 4, 2015, at 126-42, *available at*

competition and consumer choice envisioned by Section 629. The app-based “solution” is what many MVPDs are offering today, and NCTA and others have on several occasions tried to argue that because consumers can use apps to view some MVPD content on devices such as tablets and smartphones, the goals of Section 629 are being met.¹² TiVo has addressed the app-based approach in the past, explaining that while these developments are no doubt welcome to consumers, they do not measure up to the type of retail competition mandated by Section 629.¹³

Using “apps” to watch content on tablets, smartphones, and other devices does not give consumers options for viewing video content using competitive user interfaces that present MVPD content in more innovative, interesting, and user-friendly ways than the cable operator dictates in its app. The user experience is what differentiates consumer electronics products and is the reason that a consumer would purchase a retail device that provides a better experience than the consumer can get with an operator-supplied box. Retail competition involves more than simply viewing video programming on different screens; it involves innovative user interfaces, search functions, and so on that give consumers greater choice and an enhanced user experience — a true alternative to what is provided by the operator. Section 629

<https://transition.fcc.gov/dstac/wg4-draft-report-08042015.pdf>.

¹² See, e.g., Comments of The National Cable & Telecommunications Association, MB Docket No. 15-158, at 15-20 (filed Aug. 21, 2015); Comments of Verizon, MB Docket No. 15-158, at 11-14 (filed Aug. 21, 2015).

¹³ Reply Comments of TiVo Inc., MB Docket No. 15-158, at 2-3 (filed Sep. 21, 2015); Reply Comments of TiVo Inc., MB Docket No. 14-16, at 2-4 (filed Apr. 21, 2014); Comments of TiVo Inc., MB Docket No. 14-16, at 10-14 (filed Mar. 21, 2014); Reply Comments of TiVo Inc., CS Docket No. 97-80, PP Docket No. 00-67, at 7-10 (Oct. 25, 2013).

addresses the competitive availability of *navigation* device, not viewing devices.

The functionality of MVPD apps today is limited, and such apps generally do not give consumers access to all of the channels they get from their set-top box. MVPD apps do not allow consumers to search for programming across MVPD and OTT content, nor do apps allow consumers to record programs for viewing later. As consumers have seen, apps can also be withdrawn at any time.¹⁴ As is the case with MVPD apps today, the app-based solution will not guarantee that a consumer can purchase a retail navigation device to (a) receive all of the MVPD programming they are paying for; (b) record that programming for later viewing; (c) incorporate Internet-delivered content; (d) frame the experience in a user interface better and more innovative than the basic approach supplied by their MVPD; and (e) work with more than one provider. Any successor solutions to CableCARD must allow such competitive retail devices to avoid the perverse outcome in which a successor solution would allow more limited features and functionality than its predecessor.

Perhaps the clearest indication that the set-top box market is not competitive is the finding in the recent study released by Senators Markey and Blumenthal that approximately 99 percent of MVPD subscribers lease set-top boxes from their operator, and these subscribers pay a combined \$19.5 billion (\$231 per household) annually to

¹⁴ See John Callahan, *Comcast's Xfinity App for Xbox 360 to Shut Down on September 1* (Aug. 17, 2015), at <http://www.windowcentral.com/comcasts-xfinity-app-xbox-360-shut-down-september-1>; Jeff Baumgartner, *AT&T U-verse TV to Drop Support for Xbox 360 on December 31*, Multichannel News (Nov. 26, 2013), at <http://www.multichannel.com/news/content/att-u-verse-tv-drop-support-xbox-360-december-31/356856>.

MVPDs.¹⁵ These figures undeniably demonstrate that the millions of app downloads purportedly being used to view MVPD programming on tablets and other devices are *not* examples of competition; instead, they merely extend the reach of MVPDs to secondary devices and screens. A competitive market for navigation devices as envisioned by Section 629 is one in which consumers have the option to *replace* an operator-supplied set-top box with a retail device that is able to not only provide equivalent functionality, features, and MVPD programming as an operator-supplied set-top box, but also give users an alternative user interface not defined by the MVPD that may include OTT and other programming sources. In today's world of MVPD apps, consumers are simply using different screens to view programming with the same MVPD-defined user interface while continuing to pay MVPDs \$231 per household annually in set-top box leasing fees — hardly the hallmark of a competitive market for navigation devices. The MVPD app approach has not, and will not, result in the type of competition and consumer choice envisioned by Section 629.

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For the reasons discussed above, TiVo urges the Commission to build on the work of the DSTAC by initiating a rulemaking to establish solutions to replace CableCARD that better reflect today's marketplace and technology.

¹⁵ Press Release, Markey, Blumenthal Decry Lack of Choice, Competition in Pay-TV Video Box Marketplace (July 30, 2015), available at <http://www.markey.senate.gov/news/press-releases/markey-blumenthal-decry-lack-of-choice-competition-in-pay-tv-video-box-marketplace>.

Respectfully submitted,

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